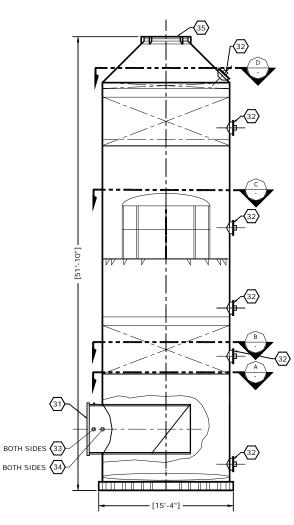
Service: (1) Remove HCl, SO₂, trace particulate from incinerator flue gas;

(2) Condense water in gas stream and cool gas to stack outlet temperature

Size: 51' 10" tall x 14' 6" I.D.

Contacting Device: Two 6' deep packed beds of 3" Intalox Saddles – See remarks



LOOKING SOUTH

Operating and Mechanical Conditions

Design Press -13" W.C.

Design Temp 172 °F

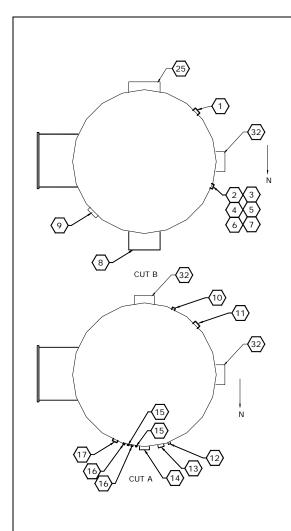
Materials: Fiberglass reinforced vinylester with polyester inner veil as corrosion barrier

	Nozzles	
Service	Size	Mark no.
Inlet Gas	64"	31
Access Ports	7 @ 24", see	32
	note 3 below	
Pressure, N	1"	33
side		
Temperature, S	1"	33
side		
Temperature,	1"	34
N side		
Not used, S	1"	34
side		
Outlet Gas	60"	35
	l	

Comments

- . A Chimney tray is installed between the two packed beds so that drainage from the top bed will not mix with flow into the bottom packed bed.
- 2. Bottom is sloped towards bottom drain. Note: configuration of inlet nozzle allows liquid seal between saturator and scrubber
- 3. There are 7 Access Ports #32. One is shown on cut A. It is at the elevation of the bottommost port on the South side of the vessel.

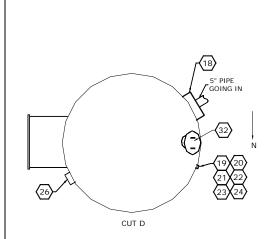
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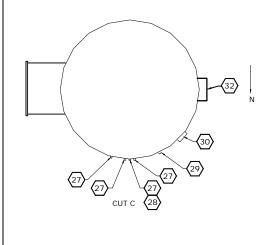


Nozzles			
Service	Size/Height	Mark no.	
1st Stage	4"@ 23'-5"	1	
Header Flush			
Return			
Pressure Tap	2"@ 19'-2"	2	
Pressure Tap	2"@ 22'-4"	3	
Pressure Tap	2"@ 23'-4"	4	
Pressure Tap	2"@ 20'-4"	5	
Pressure Tap	2"@ 19'-5"	6	
Pressure Tap	2"@ 18'-4"	7	
Packing	38"x26"@	8	
Removal	21'-5"		
First Stage	14"@ 21'-5"	9	
Feed			
Pressure Tap	2"@ 18'-4"	10	
Header Flush	4"@ 16'-2"	11	
Drain			
Manual Drain	3"@ 16'-0"	12	
Manual Drain	8"@ 15'-0"	13	
1 st Stage Drain	12"@ 15'-0"	14	
Ph probe	1"@ 15'-1"	15	
Access			
Ph probe	1"@ 15'-2"	16	
Access			
Level Gauge	3"@ 14'-9"	17	
	3"@ 23'-9"		
Packing	73" X 34 "@	25	
Removal	29' 0"		
	38"x26"@		
	34'7""		

Comments: all elevations above top of concrete below scrubber vessel

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Nozzles			
Service	Size/ Height	Mark no.	
Header Flush	17"@ 45'-4"	18	
Return			
Pressure Tap	2"@ 45'9-1/2"	19	
Pressure Tap	2"@ 44'-5"	20	
Pressure Tap	2"@ 43'-5"	21	
Pressure Tap	2"@ 42'-5"	22	
Pressure Tap	2"@ 41'-5"	23	
Pressure Tap	2"@ 40'-5"	24	
2 nd Stage Feed	14"@45'-4"	26	
Ph probe	1"@ 27'-4"	27	
access			
Not used	3/4"@ 32'-3"	28	
Brine bypass	4"@ 27'-2"	29	
2 nd Stage Drain	14"@ 27'-4"	30	

Comments: all elevations above top of concrete below scrubber vessel

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Scrubber Internal Specifications

Packing:

(a) Size, Type, & Height: top & bottom both 6 ft of 3" Intalox Saddles or mass transfer equivalent. See remarks.

(b) Method of packing: Dump into dry tower

(c) Packing Arrangement: Dumped

Liquid Distributors:

Top: Pipe Manifold Bottom: Launder Manifold

Packing Support:

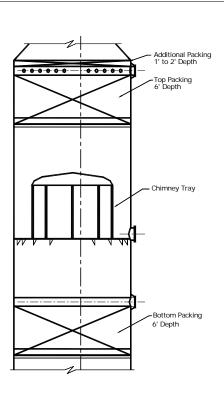
Top: 1" thick FRP grating supported by FRP beams Bottom: 1" thick FRP grating supported by FRP beams

Packing Removal Manways: At top and bottom of each packed bed

Entrainment Separator: 1 to 2' of 3" Intalox Saddles dumped on top of top packed bed

distributor

Spray Nozzles: None



Materials of Construction

Packing: Polypropylene

Distributor Tray

Top: Polyvinylchloride

Bottom: FRP

Chimney Tray: FRP

Packing Support: FRP

Remarks

Alternately, the 1st stage or bottom packing may be 40 inches of Intalox snowflake packing covered with at least 12 inches of 3 inch Intalox saddles.